

### **AMENDMENTS TO THE DRAWINGS**

The attached "Replacement Sheets" of drawings include changes to Figures 1 and 2. The attached "Replacement Sheets," which include Figures 1 and 2, replace the original sheets including Figures 1 and 2.

Attachment: 2x Replacement Sheet

### **REMARKS**

The application was originally filed with 45 Claims. Claims 2-11, 14-18, 20-30, and 46-47 are now pending in the application. Claims 2, 7-10 and 14-16 have been amended; Claims 1, 12 and 13 have been cancelled; Claims 46 and 47 are new; and, as a result of multiple restrictions/election requirements, Claims 19 and 31-45 were withdrawn from consideration.

Claims 20-28 and 30 are allowable; Claims 13 and 15 are objected to; and Claims 1-12, 14, 16-18, and 29 are rejected.

### **INFORMATION DISCLOSURE STATEMENT**

The Office Action makes reference to an Information Disclosure Statement filed as Paper 3 on October 15, 2002. Applicants are not aware of such IDS having been filed by Applicants; however, Applicants are aware of a third-party submission having been filed on or about October 14, 2002 and assumes that the Examiner has confused such third-party submission with an IDS.

Clarification on this point is respectfully requested.

### **SPECIFICATION**

The specification was objected to on the basis of certain informalities as to patent numbers referenced therein by way of background, on Page 12, Lines 11-18, which has now been corrected.

## **DRAWINGS**

Drawings were objected to on the basis that reference characters 1-10 in Figure 1 and in Figure 2 are lacking lead lines and/or require underline. Appropriate correction has been made herein.

## **CLAIM OBJECTIONS**

Claims 12-15 were objected to on the basis of a grammatical error in the spelling of the word “reactor” in Claim 12. This present amendment obviates this matter by canceling Claim 12.

## **REJECTION UNDER 35 U.S.C. § 102**

A. Claims 1-3, 12 and 14 were rejected under 35 U.S.C. § 102(b) as being anticipated by Hufton et al. (“Sorption Enhanced Reaction Process for Hydrogen Production,” AIChE).

By the present amendment, Claim 46 replaces Claim 1, containing limitations from Claims 12 and 13, and now recites a system that comprises a water-gas shift reactor. The Hufton reference does not show a system having components as recited in Claim 46.

Claims 2, 3 and 14 now depend directly or indirectly from new Claim 46; and Claim 12 has been cancelled.

Therefore, rejection for novelty on the basis of Hufton is respectfully requested to be withdrawn.

**B.** Claims 1-7, 12, 14, 16-17, and 29 were rejected under 35 U.S.C. § 102(e) as being anticipated by Keefer et al. (WO 00/16425).

It is recognized in the Office Action that Keefer and all the references of record lack any teaching or suggestion of a water-gas shift reactor, which itself has an adsorbent for adsorbing carbon monoxide, as recited in allowable Claim 13. This feature having been added to new Claim 46, it is respectfully submitted that rejection of Claims 1-7, 14, 16-17, and 29, which depend directly or indirectly from new Claim 46, is now rendered moot.

**REJECTION UNDER 35 U.S.C. § 103**

**A.** Claims 4-7, 16-18 and 29 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Hufton et al. in view of Keefer et al.

None of the references of record, either alone or in any combination, teaches or suggests a water-gas shift reactor that includes an adsorbent to adsorb carbon monoxide. This feature, now included in Claim 46, from which the aforesaid Claims 4-7, 16-18 and 29 depend directly or indirectly, render this rejection moot.

**B.** Claims 8-11 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Hufton et al. in view of Kirshnamurthy (USPN 5,096,470). Claims 8-11 were also rejected under 35 U.S.C. § 103(a) as being unpatentable over Keefer et al. in view of Kirshnamurthy.

Claims 8-11 depend directly or indirectly from new Claim 46, which contains the feature of a water-gas shift reactor, which itself contains an adsorbent to adsorb carbon monoxide, such feature not being taught or suggested in any reference or

combination of references of record. Accordingly, Claims 8-11 are respectfully submitted to be patentable.

C. Claim 18 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Keefer et al. as applied to an earlier rejection of Claim 1.

For the reasons described hereinabove with respect to Claim 46, from which Claim 18 depends indirectly, this rejection is rendered moot.

D. Claims 1-12, 14, 16-18, and 29 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Claims 1-43 of copending Application No. 09/780,079.

It is respectfully submitted that in view of the amendments made herein, this rejection is now rendered moot. Furthermore, it is respectfully submitted that even absent such amendments, this rejection does not have *prima facie* support in view of amendment to said copending application, wherein new independent Claims 44 and 51 thereof are clearly patentably distinct. Claims 2-11, 14, 16-18, and 29 in the present application are even further removed from said copending application on the basis of their dependence on new independent Claim 46 herein. Claim 46 recites features patentable over 09/780,079 consistent with allowable Claim 13.

#### **DOUBLE PATENTING**

Claims 1-12, 14, 16-18, and 29 were provisionally rejected the judicially-created doctrine of obviousness-type double patenting over Claims 1-43 of copending Application No. 09/780,079 on the basis that such claims recite only limitations that are recited in Claims 1-43 of said copending application.

It is respectfully submitted that this rejection is rendered moot in view of the amended status of claims in said copending application and the amended status of the claims herein. Note particularly, as explained above, that Claim 46 of the present application recites features patentable over 09/780,079 consistent with allowable Claim 13. Claims 2-11, 14, 16-18, and 29 depend on new Claim 46.

#### **ALLOWABLE SUBJECT MATTER**

A. It is acknowledged that Claims 13 and 15 would be allowable if rewritten to include all of the limitations of the base claim and any intervening claims.

Accordingly, new independent Claim 46 presented herein incorporates features from such claims for distinguishing further from the applied references as described herein with respect to Claim 46.

B. Claims 20-28 and 30 are said to be allowable.

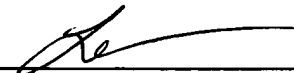
#### **CONCLUSION**

It is respectfully submitted by this response that Claims 2-11, 14-18, 20-30, and 46-47, now pending in this application, render moot the rejections and objections of the Office Action dated August 27, 2003 and issuance of Notice of Allowance recognizing same is respectfully requested.

If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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By:   
Linda M. Deschere  
Reg. No. 34,811

HARNESS, DICKEY & PIERCE, P.L.C.  
P.O. Box 828  
Bloomfield Hills, Michigan 48303  
(248) 641-1600

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